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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/561,646

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David A. Waldman

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Weaver Austin Villeneuve & Sampson LLP

P.O. BOX 70250

OAKLAND, CA 94612-0250

EXAMINER

PUNNOOSE, ROY M

ART UNIT

PAPER NUMBER

2886

NOTIFICATION DATE

DELIVERY MODE

09/04/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

USPTO@wavsip.com

Office Action Summary	Application No. 10/561,646	Applicant(s) WALDMAN ET AL.	
	Examiner ROY PUNNOOSE	Art Unit 2886	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 July 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-125 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-24 and 32-125 is/are allowed.
- 6) ☒ Claim(s) 25, 27-31 is/are rejected.
- 7) ☒ Claim(s) 26 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/20/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restriction

1. Applicant's election without traverse of claims Group I in the reply filed on 07/23/2009 is acknowledged. However, since claim 73 has been amended such that all claims are now directed to the invention of Group I, the Restriction requirement of the previous Office Action has been withdrawn. Claims 1-125 are pending and have been examined.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 25 is rejected under 35 U.S.C. 102(b) as being anticipated by Metz et al (U.S. Patent 6,061,463).

4. Claim 25 is rejected because Metz et al (Metz hereinafter) teaches of an apparatus (see Figure 2) for image acquisition of topological features of the surface of skin comprising: a waveguide 2 having an entrance edge 9a and top and bottom surfaces 5a, 5b (see col.8, line 20 – col.9, line 54 and Figures 2-4, 6A); a light source 1 configured to direct a light beam at the entrance edge 9a of the waveguide 2; a skin contact layer 215 disposed at the top surface 5a of the waveguide 2 (see col.11, lines 48-51 and Figure 6A); a holographic optical element (HOE) 3 disposed at the bottom surface 5b of the waveguide 2 configured to diffract the light beam incident from the light source 1 at the skin contact layer 215; a sensor array 7b configured to

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detect light reflected from the interface between skin and the skin contact layer 215; and means for changing the wavelength of the light source (see col.9, lines 26-35).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 27-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Metz et al (U.S. Patent 6,061,463).

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9. Claims 27-31 are rejected for the same reasons of rejection of claim 25 as detailed above and because the limitations claimed in claims 27-31 are either taught by Metz or well-known in the art or it would have been obvious to a Person Having Ordinary Skill In The Art (PHOSITA) in view of Metz's teachings to incorporate said limitations into Metz's apparatus and method for improved efficiency in examining a sample fingerprint, and it would have taken only ordinary engineering expedience and/or routine experimentation for a PHOSITA to make minor modifications as needed to Metz's apparatus and method to obtain a desired result (see entire Metz patent).

10. Claim 26 is objected to because it is dependent on a rejected base claim.

11. The prior art cited in the accompanying PTO-892 is made of record and not relied upon, is considered pertinent to applicant's disclosure.

12. Several facts have been relied upon from the personal knowledge of the examiner about which the examiner took Official Notice in this office action. Applicant must seasonably challenge well known statements and statements based on personal knowledge when they are made. In re Selmi, 156 F.2d 96, 70 USPQ 197 (CCPA 1946); In re Fischer, 125 F.2d 725, 52 USPQ 473 (CCPA 1942). See also In re Boon, 439 F.2d 724, 169 USPQ 231 (CCPA 1971) (a challenge to the taking of judicial notice must contain adequate information or argument to create on its face a reasonable doubt regarding the circumstances justifying the judicial notice). If applicant does not seasonably traverse the well-known statement during examination, then the object of the well-known statement is taken to be admitted prior art. In re Chevenard, 139 F.2d 71, 60 USPQ 239 (CCPA 1943). A seasonable challenge constitutes a demand for evidence made as soon as practicable during prosecution. Thus, applicant is charged with rebutting the well-

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known statement in the **next reply** after the Office action in which the well known statement was made.

Allowable Subject Matter

13. Claims 1, 2-20, 21-24, 26, 32-72 and 73 have allowable subject matter in combination with all the rest of the limitations of the respective claims, as indicated below:

- a. The grating layer and the at least one supporting layer have substantially similar coefficients of thermal expansion or thermo-optic coefficients or both as claimed in claim 1;
- b. Compensating for changes in the Bragg matching condition of the HOE due to changes in temperature as claimed in claims 2 and 73;
- c. HOE includes at least two co-locationally multiplexed holograms as claimed in claim 21;
- d. The means for changing the wavelength of the light source is a laser diode configured to change the operating wavelength in response to temperature-induced changes in Bragg matching condition of the HOE as claimed in claim 26; and,
- e. The means for compensating for changes in the Bragg matching condition of the HOE due to changes in temperature as claimed in claim 32.

Contact/Status Information

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Roy M. Punnoose** whose telephone number is **(571)272-2427**. The examiner can normally be reached on 9:30 AM - 6:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Tarifur R. Chowdhury** can be reached on **571-272-2287**. The **Fax** number for the organization where this application or proceeding is assigned is **571-273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Roy M. Punnoose/
Primary Examiner
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